REMARKS

The applicants have carefully considered the Office action dated July 31, 2003 and the references it cites. By way of this Response, claims 36, 38-42, 45-46, 48 and 51 have been amended. In view of the following, it is respectfully submitted that all pending claims are in condition for allowance and favorable reconsideration is respectfully requested.

As an initial matter, the undersigned wishes to thank the Examiner for her participation in a brief telephonic interview on August 13, 2003. By way of explanation, the Office action mailed July 31, 2003 identified itself as a final Office action. However, since the July 31, 2003 action was the first action on the merits, that designation was plainly in error. Accordingly, the undersigned telephoned the Examiner on August 13, 2003. During that interview, the Examiner agreed that the Office action was not final. The Examiner further indicated that the PAIR system properly identified the action as a non-final action and faxed the undersigned an updated action with the status changed to "non-final." Thus, the action pending in this case is a non-final Office action.

As a further initial matter, the applicants note that the Office action did not return signed copies of the PTO-1449's submitted with the supplemental information disclosure statement filed on May 5, 2003. A duplicate copy of that supplemental information disclosure statement, the PTO-1449 forms filed with that statement, and the stamped postcard reflecting receipt of those documents are enclosed for the Examiner's convenience. The Examiner is respectfully requested to return signed copies of the PTO-1449 forms from the supplemental information disclosure statement of May 5, 2003 and from the

second supplemental information disclosure statement filed on September 9, 2003 with the next official communication relating to this application.

Turning to the Office action, the Office action rejected claims 36, 38, 40, 45 and 51 as allegedly being directed to non-statutory subject matter. To make it clear that only statutory subject matter is being claimed, the applicants are hereby amending claims 36, 38-42, 45, 46, 48 and 51 such that those claims are now written in Beauregard format. Accordingly, the § 101 rejection must be withdrawn.

Turing to the art rejections, the Office action rejects all pending claims as being unpatentable over one or more of Dietrich et al., U.S. Patent 5,630,070, Reep, U.S. Patent 6,327,569, Rawlins, U.S. Patent 5,845,229 and/or Buman et al., U.S. Patent 6,338,040. Applicants respectfully traverse each of these rejections.

Turning first to the rejection of claim 36, the Office action rejects this claim based on a combination of Dietrich et al. and Reep. However, as shown below, regardless of how one combines those references, one does not arrive at the recitations of claim 36.

At the outset, it should be noted that Dietrich et al. is directed to a constrained production planning system. (Dietrich et al., Col. 9, lines 12-13. See also, Dietrich et al. Col. 6, line 25 – Col. 14, line 67 for an overview of the use of its system in a restaurant environment). More specifically, Dietrich et al. describe a system for automatically developing an optimized production plan given a fixed set of inputs that may be combined to satisfy a fixed demand for outputs. (Dietrich et al., Col. 10, line 66- Col. 11, line 3, and Col. 12, lines 46-49). In other words, the Dietrich et al. system attempts to

determine how best to meet demands for predetermined products. Dietrich et al. has nothing to do with estimating future profits for farms in a region of interest for growing a crop of interest.

Reep, on the other hand, describes a system for identifying the properties of a crop as it is harvested and then automatically seeking to sell that crop to a party interested in those properties via a computer aboard the combine harvesting the subject crop. (Abstract, lines 1-18). Thus, Reep describes a system for consummating a sale at harvest time, not a system for estimating future profits for farms in a region of interest for growing a crop of interest. Thus, it is plain on its face, that neither Dietrich et al. nor Reep are directed to the overall objective of claim 36. Therefore, while it is difficult to imagine how one would combine the harvester of Reep with the production planning system of Dietrich et al, even if one were to attempt to make such a combination, one would not arrive at a system to estimate future profits for farms in a region of interest for growing a crop of interest.

Turning to claim 36 in detail, claim 36 recites "determining projected profits to each of the farms in the region of interest for growing products different than the crop of interest." The Office action has apparently ignored this claim language as it contends that it is met by Col. 7, lines 15-28 of Dietrich et al. However, even a cursory review of the cited passage demonstrates that it merely describes the raw materials needed to make an omelet. It makes no mention of: 1) determining projected profits of any kind, 2) determining projected profits to each farm in a region of interest, or 3) determining projected profits to each of the farms in the region of interest for

growing products <u>different than the crop of interest</u>. Therefore, it is quite evident that Dietrich et al. do not meet this element of claim 36.

Claim 36 also recites "selecting at least one of the products (different from the crop of interest) to be replaced by the crop of interest on at least some of the farms in the region of interest." The Office action attempts to find this recitation at Col. 36, lines 11-18 of Dietrich et al. However, a brief review of that passage of Dietrich et al. reveals that it contemplates the substitution of parts (i.e., inputs) in the production process to maximize profit in seeking to meet a demand for an end product. In contrast, replacing at least one of the products different from the crop of interest with the crop of interest on at least some of the farms is not part substitution, it is changing the end product. Therefore, it is plain that Dietrich et al. also fail to meet this element of claim 36.

Claim 36 further recites "summing the profits to be earned by the farms in the region of interest for growing the crop of interest." The Office action claims to find this recitation at Col. 35, lines 27-30 of Dietrich et al. However, a brief review of that passage reveals that it merely describes allocating resources across a set of orders to optimize the total profit of the orders. Of course, optimizing profits is not summing profits. Therefore, the cited passage of Dietrich et al. in no way teaches or suggests "summing the profits to be earned by the farms in the region of interest for growing the crop of interest."

Claim 36 further recites "identifying farms in the region of interest."

The Office action claims to find this recitation at Col. 13, lines 36-39 of Reep.

However, a review of that passage of Reep reveals that it merely describes

correlating a property of a harvested crop to a location in an agricultural field.

Of course, correlating a property of a crop to a specific field location cannot reasonably be construed to mean "identifying farms in a region of interest."

Therefore, Reep fails to meet this recitation of claim 36.

Moreover, claim 36 additionally recites "electronically accessing at least one on-line market to ascertain at least one current market price for at least one product different than the crop of interest." The Office action apparently improperly ignores the underlined language as it purports to find this recitation in Col. 8, lines 40-54 of Reep. However, that passage of Reep makes no mention of ascertaining a current market price of any sort, and, thus, does not teach or suggest ascertaining a market price for a product which is different from a product of interest. Indeed, Col. 10, lines 23-29 makes it quite clear that Reep has no concern with any product other than the product currently being harvested as the Reep system is directed to seeking a market for a property of a crop as it is harvested. Therefore, Reep fails to meet this recitation of claim 36.

From the foregoing, it is self-evident that, not only is there absolutely no motivation to combine the on-line combine of Reep with the production plan optimizer of Dietrich et al., but even if one were to make that combination, one would still fail to meet at least 5 of the 6 elements of claim 36. Accordingly, claim 36 should be allowed.

Turning to the rejection of claim 37, the Office action rejects this claim as being unpatentable over Rawlins. However, whereas claim 37 is directed to an apparatus for determining a price to offer a farmer to grow a crop of interest, Rawlins describes a method and apparatus for mapping crop quality

to field locations. In Rawlins, the farmer pre-selects individual field areas for crop quality assessment. (Rawlins, abstract, lines 2-4). Values representing these field locations are then stored in a computer memory. (Rawlins, abstract, lines 4-6). A harvester equipped with a global positioning system (GPS) is then used to harvest crops. (Rawlins, abstract, lines 1-2). When the GPS indicates that the harvester is harvesting in one of the field areas that the farmer pre-selected, a trigger signal is generated to cause a physical crop marker to be placed into the crops being harvested by the harvester. (Rawlins, abstract, lines 9-14).

Each marker is assigned a unique identifier. (Rawlins, abstract, lines 7-9). Thus, the harvester automatically stores the unique identifier in a table to associate the marker with the field location where the marker was dispensed. (Rawlins, abstract, lines 14-16). As a result, the marker labels the harvested crops physically containing the marker as having been harvested from a specific field location.

Later, when processing the crop, Rawlins attempts to locate the markers in the crop stream. (Rawlins, Col. 2, lines 31-33). When a marker is detected, a sample of the crop from around the marker is extracted and subjected to one or more quality tests. (Rawlins, Col. 2, lines 33-37). The quality tests then enable the creation of field maps mapping the crop quality parameters to the field positions that were tested. (Id.) As explained by Rawlins:

Data on the quality of the crop can then be kept with respect to the selected field locations. Additional data can be collected on the selected field locations such as the amount of pesticide or herbicide and the amount of fertilizer and water applied to the selected field location. Over the course of years, the data can be collected and analyzed to determine which inputs of resources determine or optimize the quality of data obtained through the above method. The inputs can be modified to see how quality differs. Once enough data are gathered, the quality as an output can be optimized with respect to selected inputs. Furthermore, the profits for a quality crop can be compared to profits associated with a maximum yield plan from the same individual field area or crop management area 22 or 24.

(Rawlins, Col. 7, lines 14-28).

In summary, Rawlins discloses a system for tracking which fields or parts of a field were used to produce a given crop, and to use that information to map crop quality parameters to the fields or parts of fields as a vehicle to making better farming decisions. In other words, the Rawlins system is a farming data collecting system.

The invention claimed in claim 37 is very different than Rawlins. The invention recited in claim 37 is "an apparatus <u>for determining a price to offer a farmer</u> to grow a crop of interest." The Rawlins system does not determine even a single price to offer a farmer. Rather, as explained above, the Rawlins system is intended to gather data with respect to fields or portions of fields for use by a farmer in managing his farm. Thus, the Rawlins system is not even directed at the same general end as the apparatus recited in claim 37.

Further, claim 37 recites "a database containing <u>current market price</u> <u>data for crops</u> which are different from the crop of interest." Rawlins has no such database. The Office action attempts to find such a database at Col. 2, lines 17-19 and Col. 3, lines 50-52 of Rawlins. However, the cited passages merely recite storing longitude and latitude values. Of course, longitude and



latitude values are not current market price data for crops. Accordingly, it is clear the Rawlins does not teach or suggest this element of claim 37.

Claim 37 further recites "a profit estimator ... for estimating a profit that the farmer can expect to earn by growing at least one of the crops which are different from the crop of interest." Rawlins does not disclose or suggest any structure to estimate profits for growing crops. At most, Rawlins discusses using the data collected with his system to compare the profits from a quality crop to the profits associated with a maximum yield plan. (Rawlins, Col. 7, lines 25-28). Comparing the actual profits achieved for a quality optimized crop to the actual profits achieved from a yield maximized crop is not estimating profits from growing crops. It is comparing actual profits to actual profits. Further, even if one were to misconstrue lines 25-28 of Column 7 of Rawlins as teaching or suggesting profit estimation, it would still not teach or suggest a structure for estimating the profit to be earned by growing a crop which is different from the crop of interest. Therefore, it is clear that Rawlins also fails to teach or suggest this element of claim 37.

Claim 37 further recites "a product selector ... to select a crop from the at least one of the crops which are different from the crop of interest." The Office action attempts to find this element at Col. 6, lines 31-36 of Rawlins. However, that passage of Rawlins merely describes placing a marker into a stream of crops being harvested by a combine. If this can be interpreted as a product selector to select a crop, it can only be viewed as selection of a crop of interest, not of selecting a crop which is different from the crop of interest as recited in this element of claim 37, because the marker is placed in the crop based on a trigger signal indicating that the harvester ahs entered an area of

interest. Therefore, it is clear the Rawlins also fails to teach or suggest this element of claim 37.

Claim 37 also recites "a production estimator ... for <u>estimating a</u> <u>quantity of the crop of interest</u> to be produced by a farmer on acreage associated with the crop selected by the product selector." The Office action attempts to find this element at Col. 2, lines 12-15 of Rawlins. However, that passage describes <u>measuring</u> "the quantity of the harvested crop." (See Rawlins, Col. 2, line 16). Of course, measuring a quantity of a harvested crop in no way teaches or suggests estimating a quantity of a crop to be produced later. Accordingly, it is unmistakably clear the Rawlins fails to teach or suggest this element of claim 37.

The last element of claim 37 recites "a pricing engine ... to develop a price to be offered the farmer." The Office action claims to find a pricing engine at Col. 9, lines 5-13 of Rawlins. However, that passage of Rawlins merely states that different grades of crops may fetch different prices in the marketplace. This is in no way a disclosure or suggestion of a pricing engine of any sort, let alone a pricing engine to develop a price to be offered a farmer to grow a crop of interest based on the factors recited in claim 37.

Accordingly, Rawlins also fails to teach or suggest this element of claim 37.

Based on the foregoing, it is evident that none of the elements of claim 37 are taught or suggested by Rawlins. Accordingly, claim 37 must be allowed.

Independent claim 38 is also allowable over Rawlins. The invention recited in claim 38 is "an article of manufacture storing machine readable instructions which, when executed by a machine, cause the machine to

determine a price to offer a farmer to grow a crop of interest." The Rawlins system does not determine even a single price to offer a farmer. Rather, as explained above, the Rawlins system is intended to gather data with respect to fields or portions of fields for use by a farmer in managing his farm. Thus, the Rawlins system is not even directed at the same general end as the apparatus recited in claim 38.

Further, claim 38 recites "accessing a database containing <u>current</u> market price data for <u>crops</u> which are different from the crop of interest."

Rawlins accesses no such database. The Office action attempts to find an access to such a database at Col. 2, lines 17-19 and Col. 3, lines 50-52 of Rawlins. However, the cited passages merely recite storing longitude and latitude values. Of course, longitude and latitude values are not current market price data for crops. Accordingly, it is clear the Rawlins does not teach or suggest this element of claim 38.

Claim 38 further recites "estimating a profit that the farmer can expect to earn by growing at least one of the crops which are different from the crop of interest." Rawlins does not disclose or suggest estimate profits for growing crops. At most, Rawlins discusses using the data collected with his system to compare the profits from a quality crop to the profits associated with a maximum yield plan. (Rawlins, Col. 7, lines 25-28). Comparing the actual profits achieved for a quality optimized crop to the actual profits achieved from a yield maximized crop is not estimating profits from growing crops. It is comparing actual profits to actual profits. Further, even if one were to misconstrue lines 25-28 of Column 7 of Rawlins as teaching or suggesting profit estimation, it would still not teach or suggest estimating the profit to be

earned by growing a crop which is different from the crop of interest.

Therefore, it is clear the Rawlins also fails to teach or suggest this element of claim 38.

Claim 38 further recites "selecting a crop from the at least one of the crops which are different from the crop of interest." The Office action attempts to find this element at Col. 6, lines 31-36 of Rawlins. However, that passage of Rawlins merely describes placing a marker into a stream of crops being harvested by a combine. If this can be interpreted as selecting a crop, it can only be viewed as selection of a crop of interest, not as selecting a crop which is different from the crop of interest as recited in this element of claim 38, because the marker is placed in the crop based on a trigger signal indicating that the harvester ahs entered an area of interest. Therefore, it is clear the Rawlins also fails to teach or suggest this element of claim 38.

Claim 38 also recites "estimating a quantity of the crop of interest to be produced by a farmer on acreage associated with the selected crop." The Office action attempts to find this element at Col. 2, lines 12-15 of Rawlins. However, that passage describes measuring "the quantity of the harvested crop." (See Rawlins, Col. 2, line 16). Of course, measuring a quantity of a harvested crop in no way teaches or suggests estimating a quantity of a crop to be produced later. Accordingly, it is unmistakably clear the Rawlins fails to teach or suggest this element of claim 38.

The last element of claim 38 recites "developing a price to be offered the farmer of interest to grow the estimated quantity of the crop of interest based at least in part on the profit that the farmer can expect to earn by growing the selected crop which is different than the crop of interest." The

Office action claims to find a pricing engine at Col. 9, lines 5-13 of Rawlins. However, that passage of Rawlins merely states that different grades of crops may fetch different prices in the marketplace. This is in no way a disclosure or suggestion of a pricing engine of any sort, let alone a pricing engine to develop a price to be offered a farmer to grow a crop of interest based on the factors recited in claim 38. Accordingly, Rawlins also fails to teach or suggest this element of claim 38.

Based on the foregoing, it is evident that none of the elements of claim 38 are taught or suggested by Rawlins. Accordingly, claim 38 must be allowed.

Turning to independent claim 40, the Office action rejects claim 40 over Dietrich et al. when combined with Reep. However, claim 40 is allowable over those references.

As explained in detail above, Dietrich et al. describe a system for automatically developing an optimized production plan given a fixed set of inputs that may be combined to satisfy a fixed demand for outputs. (Dietrich et al., Col. 10, line 66- Col. 11, line 3, and Col. 12, lines 46-49). Reep describes a system for identifying the properties of a crop as it is harvested and then automatically seeking to sell that crop to a party interested in those properties via a computer aboard the combine harvesting the subject crop. (Abstract, lines 1-18). Therefore, it is difficult to imagine how one would combine the harvester of Reep with the production planning system of Dietrich et al. Indeed, on its face, the combination of those references is unsupported by any evidence of a motivation to combine, other than a

motivation to attempt to re-create the applicants' claimed inventions. On this basis alone, the rejection of claim 40 must be withdrawn.

Turning to claim 40 in detail, claim 40 recites "determining projected profits to ... farms for growing at least one product different than the crop of interest." The Office action has apparently ignored this claim language as it contends that it is met by Col. 7, lines 15-28 of Dietrich et al. However, even a cursory review of the cited passage demonstrates that it merely describes the raw materials needed to make an omelet. It makes no mention of: 1) determining projected profits of any kind, 2) determining projected profits to farms, or 3) determining projected profits to ... farms for growing a product different than the crop of interest. Therefore, it is quite evident that Dietrich et al. do not meet this element of claim 40.

Claim 40 also recites "selecting at least one of the products to be replaced by the crop of interest on at least some of the .. farms based at least in part upon the projected profits." The Office action attempts to find this recitation at Col. 36, lines 11-18 of Dietrich et al. However, a brief review of that passage of Dietrich et al. reveals that it contemplates the substitution of parts (i.e., inputs) in the production process to maximize profit in seeking to meet a demand for an end product. In contrast, replacing at least one of the products different from the crop of interest with the crop of interest on at least some of the farms is not part substitution, it is changing the end product. Therefore, it is plain that Dietrich et al. also fail to meet this element of claim 40.

Claim 40 further recites "identifying farms capable of growing a crop of interest." The Office action claims to find this recitation at Col. 13, lines

36-39 of Reep. However, a review of that passage of Reep reveals that it merely describes correlating a property of a harvested crop to a location in an agricultural field. Of course, correlating a property of a crop to a specific field location cannot reasonably be construed to mean "identifying farms capable of growing a crop of interest." Therefore, Reep fails to meet this recitation of claim 40.

Moreover, claim 40 additionally recites "electronically accessing at least one on-line market to ascertain at least one current market price for at least one product different than a crop of interest." The Office action apparently improperly ignores the underlined language as it purports to find this recitation in Col. 8, lines 40-54 of Reep. However, that passage of Reep makes no mention of ascertaining a current market price of any sort, and, thus, does not teach or suggest ascertaining a market price for a product which is different from a product of interest. Indeed, Col. 10, lines 23-29 makes it quite clear that Reep has no concern with any product other than the product currently being harvested as the Reep system is directed to seeking a market for a property of a crop as it is harvested. Therefore, Reep fails to meet this recitation of claim 40.

Claim 40 also recites "estimating an economic effect that substituting the crop of interest for the at least one of the products will have on at least one of: (a) a transportation market; (b) a commodity market; (c) demand for storage space; (d) land usage; (e) a price of at least one of the at least one of the products; (f) supply of at least one product; (g) demand for at least one input to a farm." The Office action argues that this recitation is met by Col. 5, line 66 – Col. 6, line 9 of Reep. However, that passage of Reep merely

identifies types of crop properties that may be analyzed by the combine, and specifies that the combine carries a GPS system and a computer to analyze the properties of the crop it harvest. There is no suggestion in Reep of: 1) estimating an economic effect; 2) estimating an economic effect of substituting the crop of interest for another product; or 3) estimating an economic effect of substituting the crop of interest for another product on any of (a) a transportation market; (b) a commodity market; (c) demand for storage space; (d) land usage; (e) a price of at least one of the at least one of the products; (f) supply of at least one product; (g) demand for at least one input to a farm. Therefore, it is abundantly clear that Reep does not meet this element of claim 40.

From the foregoing, it is self-evident that, not only is there absolutely no motivation to combine the on-line combine of Reep with the production plan optimizer of Dietrich et al., but even if one were to make that combination, one would still fail to meet any of the elements of claim 40. Accordingly, claim 40, and all claims depending therefrom, should be allowed.

Turning to independent claim 45, the Office action rejects claim 45 over Dietrich et al. when combined with Reep. However, claim 45 is allowable over those references.

As explained in detail above, the combination of Dietrich et al. and Reep is unsupported by an evidence of a motivation to combine, other than a motivation to attempt to re-create the applicants' claimed inventions. On this basis alone, the rejection of claim 45 should be withdrawn.

Turning to claim 45 in detail, claim 45 recites "determining projected profits to ... farms for growing products different than the crop of interest." The Office action has apparently ignored this claim language as it contends that it is met by Col. 7, lines 15-28 of Dietrich et al. However, even a cursory review of the cited passage demonstrates that it merely describes the raw materials needed to make an omelet. It makes no mention of: 1) determining projected profits of any kind, 2) determining projected profits to farms, or 3) determining projected profits to ... farms for growing products different than the crop of interest. Therefore, it is quite evident that Dietrich et al. do not meet this element of claim 45.

Claim 45 also recites "selecting at least one of the products to be replaced by the crop of interest on at least some of the .. farms based at least in part upon the projected profits." The Office action attempts to find this recitation at Col. 36, lines 11-18 of Dietrich et al. However, a brief review of that passage of Dietrich et al. reveals that it contemplates the substitution of parts (i.e., inputs) in the production process to maximize profit in seeking to meet a demand for an end product. In contrast, replacing at least one of the products different from the crop of interest with the crop of interest on at least some of the farms is not part substitution, it is changing the end product. Therefore, it is plain that Dietrich et al. also fail to meet this element of claim 45.

Claim 45 further recites "identifying farms capable of growing a crop of interest." The Office action claims to find this recitation at Col. 13, lines 36-39 of Reep. However, a review of that passage of Reep reveals that it merely describes correlating a property of a harvested crop to a location in an

agricultural field. Of course, correlating a property of a crop to a specific field location cannot reasonably be construed to mean "identifying farms capable of growing a crop of interest." Therefore, Reep fails to meet this recitation of claim 45.

Moreover, claim 45 additionally recites "electronically accessing at least one on-line market to ascertain at least one current market price <u>for at least one product different than a crop of interest</u>." The Office action apparently improperly ignores the underlined language as it purports to find this recitation in Col. 8, lines 40-54 of Reep. However, that passage of Reep makes no mention of ascertaining a current market price of any sort, and, thus, does not teach or suggest ascertaining a market price for a product which is different from a product of interest. Indeed, Col. 10, lines 23-29 makes it quite clear that Reep has no concern with any product other than the product currently being harvested as the Reep system is directed to seeking a market for a property of a crop as it is harvested. Therefore, Reep fails to meet this recitation of claim 45.

Claim 45 also recites "selecting a subset of the identified farms to grow the crop of interest based on the profit that the identified farms can expect to earn by growing the crop which is replaced by the crop of interest and upon at least one risk associated with the geographic location of the identified farms." The Office action argues that this recitation is met by Col. 3, lines 25-30 and Col. 4, lines 32-46 of Reep. However, those passages of Reep merely state that there is a risk of destruction or loss associated with storing a crop and that, therefore, Reep's invention is to sell the crop as it is harvested. There is absolutely no disclosure of 1) selecting a subset of the identified farms to grow

the crop of interest, 2) selecting a subset of the identified farms to grow the crop of interest based on the profit that the identified farms can expect to earn by growing the crop which is replaced by the crop of interest, or 3) selecting a subset of the identified farms to grow the crop of interest based on a risk associated with the geographic location of the identified farms. Therefore, it is abundantly clear that Reep does not meet this element of claim 45.

From the foregoing, it is self-evident that, not only is there absolutely no motivation to combine the on-line combine of Reep with the production plan optimizer of Dietrich et al., but even if one were to make that combination, one would still fail to meet any of the elements of claim 45. Accordingly, claim 45, and all claims depending therefrom, should be allowed.

Turning to independent claim 51, the Office action rejects claim 51 over Dietrich et al. when combined with Reep. However, claim 51 is allowable over those references.

As explained in detail above, the combination of Dietrich et al. and Reep is unsupported by an evidence of a motivation to combine, other than a motivation to attempt to re-create the applicants' claimed inventions. On this basis alone, the rejection of claim 51 should be withdrawn.

Turning to claim 51 in detail, claim 51 recites "determining a first set of aggregated projected inputs and outputs of the farms in the region of interest for growing products different than the crop of interest." The Office action has apparently ignored this claim language as it contends that it is met by Col. 8, lines 34-45 of Dietrich et al. However, the cited passage is merely a demand table and an inventory table. These tables make no mention of: 1)

determining a first set of aggregated projected inputs and outputs of farms in a region of interest, or 2) determining a first set of aggregated projected inputs and outputs of the farms in the region of interest for growing <u>products</u> different than the crop of interest. Therefore, it is quite evident that Dietrich et al. do not meet this element of claim 51.

Claim 51 also recites "selecting at least one of the products to be replaced by the crop of interest on at least some of the farms in the region of interest." The Office action attempts to find this recitation at Col. 36, lines 11-18 of Dietrich et al. However, a brief review of that passage of Dietrich et al. reveals that it contemplates the substitution of parts (i.e., inputs) in the production process to maximize profit in seeking to meet a demand for an end product. In contrast, replacing at least one of the products different from the crop of interest with the crop of interest on at least some of the farms in a region of interest is not part substitution, it is changing the end product.

Therefore, it is plain that Dietrich et al. also fail to meet this element of claim 51.

Claim 51 further recites "determining a second set of aggregated projected inputs and outputs of farms in the region of interest assuming the at least some of the farms replace the at least one of the products with the crop of interest." The Office action claims to find this recitation at Col. 9, lines 5-6 of Dietrich et al. However, a review of that passage reveals that it is a table showing net requirement shortages. That passage, therefore, does not teach or suggest: 1) determining a second set of aggregated projected inputs and outputs of farms in the region of interest, or 2) determining that second set while assuming at least some of the farms replace the at least one of the

products with the crop of interest. Therefore, Dietrich et al. fail to meet this recitation of claim 51.

Moreover, claim 51 additionally recites "computing a difference between the first and second sets of aggregated inputs and outputs to estimate at least one effect growing the crop of interest will have on the region of interest." The Office action claims to find this recitation at Col. 9, lines 5-9 of Dietrich et al. However, a review of that passage reveals that it is a table showing net requirement shortages. That passage, therefore, does not teach or suggest: 1) computing a difference between the first and second sets of aggregated inputs and outputs, or 2) estimating at least one effect growing the crop of interest will have on the region of interest. Therefore, Dietrich et al. fail to meet this recitation of claim 51.

Claim 51 further recites "identifying farms in the region of interest which are capable of growing a crop of interest." The Office action claims to find this recitation at Col. 13, lines 36-39 of Reep. However, a review of that passage of Reep reveals that it merely describes correlating a property of a harvested crop to a location in an agricultural field. Of course, correlating a property of a crop to a specific field location cannot reasonably be construed to mean "identifying farms in a region of interest which are capable of growing a crop of interest." Therefore, Reep fails to meet this recitation of claim 51.

From the foregoing, it is self-evident that, not only is there absolutely no motivation to combine the on-line combine of Reep with the production plan optimizer of Dietrich et al., but even if one were to make that combination, one would still fail to meet any of the elements of claim 51.

Accordingly, claim 51, and all claims depending therefrom, should be allowed.

With the exception of changing the type of some of the claims from method claims to article of manufacture claims, the amendments made herein are either broadening or are merely clarifying in that the amended claims are intended to state the same thing as the claim prior to amendment (i.e., to have the same scope both before and after the amendments) in a manner consistent with the new style of the claim language. Consequently, these broadening or clarifying amendments¹ do not give rise to prosecution history estoppel or limit the scope of equivalents of the claims under the doctrine of equivalents. The only estoppel that attaches is that the claims are article of manufacture claims, not method claims.

If the Examiner is of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is invited to contact the undersigned at the number identified below.

¹ For example, the references to "step or steps" have been removed from the claims to make it clear that there are no step-plus-function claims in this application. These amendments are either broadening or have no impact on the scope of the claims.

The Commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required during the pendency of this application under 37 CFR 1.16 or 1.17 to Deposit Account No. 50-2455.

Respectfully submitted,

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James A. Flight

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By:

October 31, 2003

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